- drying said granules,
- extruding or hot mixing said granules to form a homogeneous mixture, wherein said insulating material shows no heterogeneity on a scale of 0.1 μ m as observed under scanning electron microscopy and wherein the conducting polymer represents 10 to 5000 ppm of the insulating materials having improved resistance to thermal ageing.
- 7. (Twice amended)The method according to claim 6, characterized in that the conducting polymer is a conducting polymer grafted onto an insulating polymer, or is a copolymer containing at least one conjugate system.
- 11. (Twice amended)The material having improved resistance to thermal ageing according to claim 16, characterized in that the insulating polymer is a thermoplastic resin selected from the group consisting of acrylic, styrene, vinyl resins cellulose resins, polyolefins, fluorine-containing polymers, polyethers, polyimides, polycarbonates, polyurethanes, silicones, and mixtures of homopolymers and copolymers thereof.
- 12. (Twice amended)The material having improved resistance to thermal ageing according to claim 16, characterized in that the insulating polymer is selected from the group consisting of polyethylene, low density polyethylene, high density polyethylene, linear low density polyethylene, polypropylene, ethylene-propylene-diene terpolymer, fluorine-containing polyvinylidene, ethylene butacrylate and copolymers of ethylene and vinyl acetate, either alone or in a mixture.
- 13. (Twice amended) The material having improved resistance to thermal ageing according to claim 16, characterized in that the insulating polymer is a thermosetting resins, selected from the group consisting of polyesters, epoxy resins and phenol resins.
- 14. (Twice amended)The material having improved resistance to thermal ageing according to claim 16, characterized in that the conducting polymer has a conductivity of at least approximately 10⁻⁹S.cm⁻¹.
- 16. (Twice amended)An insulating material having improved resistance to thermal ageing, containing 10 to 5000 ppm of a conducting polymer dispersed in or on an insulating